

## **Heliophysics Portal — Multi-Instrument Database of Solar Flares**

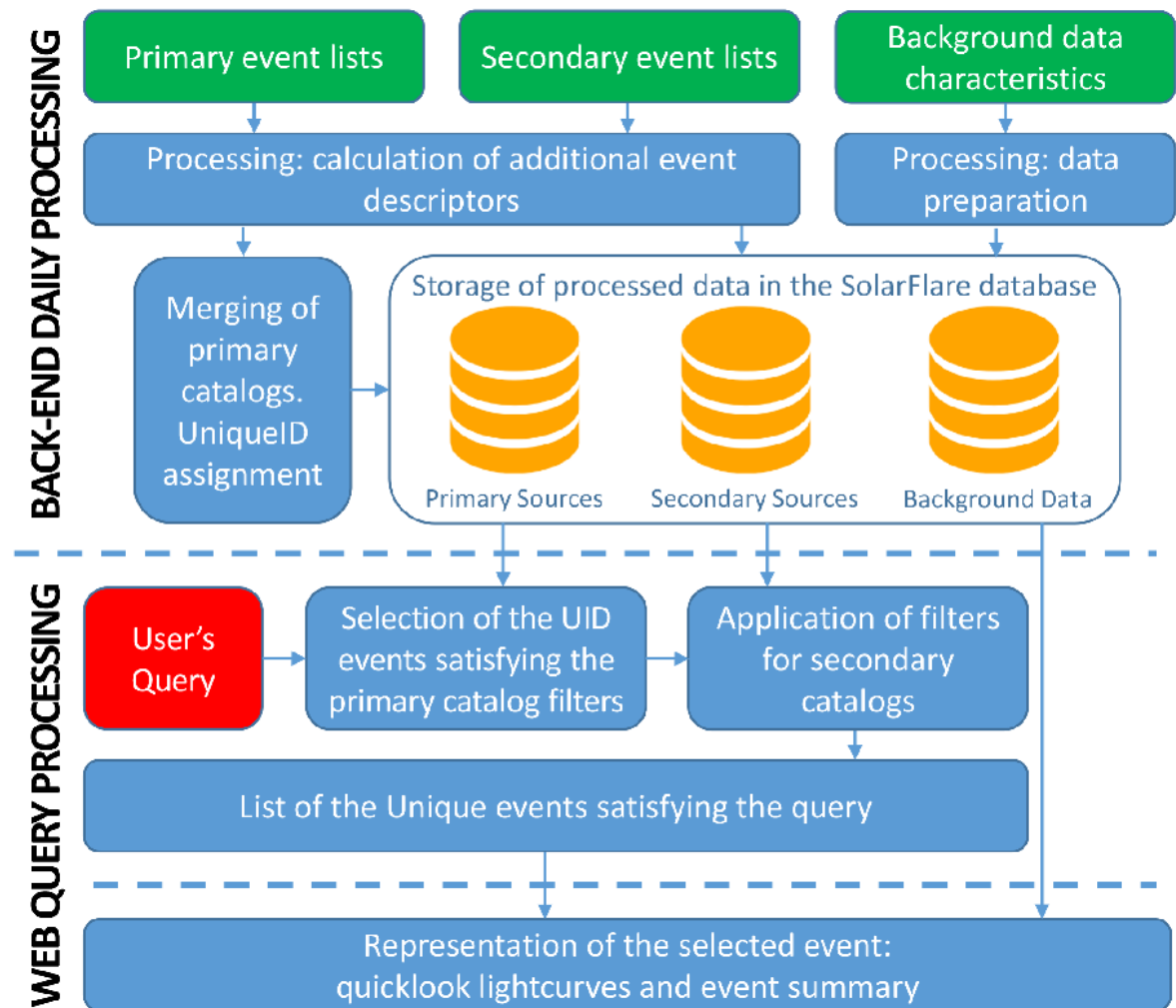
- Development of the heliportal web site with a multi-instrument database of solar flares
  - To facilitate studies of solar flare radiation physics we have developed an Interactive Multi-Instrument Database of Solar Flares, which is being integrated into the Heliportal at the NASA Ames.
  - This web-accessible database allows the user to search for uniquely identified flare events based on (1) their physical descriptors and (2) the availability of observations by a particular set of instruments, in order to investigate their radiation properties, including EUV and X-ray radiation.
  - Currently, the data from three primary flare lists (NOAA, NASA, and Lockheed-Martin) and a variety of other event catalogs from spacecraft and ground-based observations have been integrated into the database.

- The multi-instrument database of solar flares is essential for modeling the impact of solar flares to improve

- Statistical studies of short- and long-term effects of ionizing radiation;
- Physical flare models;
- Flare prediction.

### Current availability:

- Fully functional database prototype is available at <http://solarflare.njit.edu>
- Upcoming Heliophysics portal at NAS <http://heliportal.nas.nasa.gov>



Database Architecture.